



**CONSTRUCTION**

- 1. EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- 2. THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COMPLYING WITH APPLICABLE FEDERAL, STATE, LOCAL, AND PRIVATE UTILITY COMPANY REQUIREMENTS, CODES, AND SPECIFICATIONS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTORS TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
- 3. ALL WORK PERFORMED BY THE CONTRACTOR SHALL CONFORM TO THE LATEST REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT.
- 4. TOPOGRAPHICAL INFORMATION TAKEN FROM SURVEY COMPLETED BY BRIDGEPOINT, LLC ON JANUARY 25, 2017.
- 5. BEFORE INSTALLATION OF STORM SEWER, OR OTHER UTILITY, THE CONTRACTOR SHALL VERIFY ALL CROSSINGS, BY EXCAVATION WHERE NECESSARY, AND INFORM THE OWNER AND THE ENGINEER OF ANY CONFLICTS.
- 6. NOTHING IN THE GENERAL NOTES SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA.
- 7. ANY AND ALL REFERENCES IN THESE PLANS AND SPECIFICATIONS (CONSTRUCTION DOCUMENTS) TO BRANDED PRODUCTS, PROCEDURES OR PATENTED PROCESSES ARE ASSUMED TO CARRY AN IMPLIED STATEMENT OF "OR APPROVED EQUAL" UNLESS SPECIFICALLY NOTED OTHERWISE WITH "NO SUBSTITUTIONS ALLOWED".
- 8. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP, INCLUDING BUT NOT LIMITED TO PAVING, STRIPING, AND CONCRETE SHALL CONFORM TO THE CURRENT STANDARD SPECIFICATION, DETAILS AND REQUIREMENTS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION ("TDOT").
- 9. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION. IT IS NOT THE ENGINEER'S INTENT THAT ANY SINGLE PLAN SHEET IN THIS SET OF DOCUMENTS FULLY DEPICT ALL WORK ASSOCIATED WITH THE PROJECT.
- 10. ALL PROPOSED GRADES SHOWN ARE FINAL GRADES, TOP OF GROUND LEVEL, OR TOP OF PAVEMENT, OR GRATE ELEVATION AT THE DRAWDOWN POINT, UNLESS INDICATED OTHERWISE.

**LAYOUT**

- 1. THE CONTRACTOR SHALL CHECK EXISTING GRADES, DIMENSIONS, AND INVERTS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.
- 2. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES. CARE SHALL BE TAKEN TO PROTECT UTILITIES THAT ARE TO REMAIN. RELOCATE EXISTING UTILITIES AS INDICATED, BASED UPON UTILITY COMPANY SPECIFICATIONS, AND AS NECESSARY FOR CONSTRUCTION. INSTALL ALL UTILITIES, INCLUDING CONDUITS, PRIOR TO INSTALLATION OF PAVED SURFACES.
- 3. PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. FIELD ADJUSTMENT OF FINAL GRADES WITH THE WRITTEN APPROVAL OF THE ENGINEER MAY BE NECESSARY.
- 4. ALL DAMAGE TO EXISTING PAVEMENT TO REMAIN WHICH RESULTS FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED WITH LIKE MATERIALS AT THE CONTRACTOR'S EXPENSE. CONTRACTOR TO PROVIDE PRE-CONSTRUCTION PHOTO DOCUMENTATION OF THE ENTIRE SITE TO ENGINEER BEFORE BEGINNING WORK.
- 5. CONTRACTOR SHALL MAINTAIN ONE SET OF AS-BUILT/RECORD DRAWINGS ON THE JOB SITE DURING CONSTRUCTION FOR DISTRIBUTION TO THE OWNER AND/OR OWNER'S REPRESENTATIVE UPON COMPLETION.
- 6. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT OR FACE OF CURB UNLESS OTHERWISE NOTED IN THE PLANS.

**CONSTRUCTION WORK ZONE & TRAFFIC CONTROL**

- 1. THE CONTRACTOR SHALL DEVELOP TRAFFIC CONTROL PLANS FOR ALL CONSTRUCTION ACTIVITIES AND PROVIDE TO THE ENGINEER A MINIMUM OF SEVEN (7) WORKING DAYS PRIOR TO STARTING WORK FOR REVIEW AND APPROVAL. ALL TRAFFIC CONTROL PLANS AND TRAFFIC CONTROL DEVICES SHALL MEET OR EXCEED STANDARDS CONTAINED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND TDOT STANDARDS.
- 2. CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH STATE DEPARTMENT OF TRANSPORTATION REGULATIONS AND AS REQUIRED BY LOCAL AGENCIES WHEN WORKING IN AND/OR ALONG STREETS, ROADS, HIGHWAYS, ETC. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL AND COORDINATE WITH LOCAL AND/OR STATE AGENCIES REGARDING THE NEED, EXTENT AND LIMITATIONS ASSOCIATED WITH INSTALLING AND MAINTAINING TRAFFIC CONTROL MEASURES.
- 3. ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.
- 4. IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER.
- 5. A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.
- 6. TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
- 7. USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- 8. THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF AN OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- 9. CONTRACTOR TO MAINTAIN ACCESS TO DRIVEWAYS WITHIN VICINITY OF PROJECT UNLESS SPECIFICALLY NOTED ON TRAFFIC CONTROL PLAN.

**PERMITS, PLANS & RECORDS**

- 1. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO ARCHAEOLOGY, ECOLOGY, HISTORICAL, HAZARDOUS MATERIALS, AIR AND NOISE, TOEC ARAP/401, USACE SECTION 404, AND TOEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING ANY MATERIAL AND STAGING AREAS AND THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS TO BE USED. ANY SUCH PERMITS SHALL BE SUPPLIED TO THE OWNER PRIOR TO THE USE OF THE PERMITTED AREA(S).
- 2. ANY DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER. THE OWNER SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLAN REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.
- 3. IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE OWNER SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS ARE NEEDED. THE OWNER SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.
- 4. THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED THE EXPIRATION DATE. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE OWNER TO COMMENCE PERMIT RENEWAL PROCESS.
- 5. THE EPSC PLAN IS TO SERVE AS AN INITIAL GUIDE FOR SITE PERSONNEL AS THE CONSTRUCTION PROCESS DEVELOPS. IT MUST BE AMENDED, MODIFIED, AND UPDATED WHENEVER A CHANGE IN THE DESIGN OR CONSTRUCTION OF THE PROJECT OCCURS. THE STAGES DEPICTED IN THE EPSC PLANS MAY NOT COINCIDE WITH THE ACTUAL PHASES OF CONSTRUCTION ESTABLISHED BY THE CONTRACTOR DURING CONSTRUCTION, THUS MODIFICATIONS WILL BE REQUIRED TO ENSURE THE EPSC PLAN IS MAINTAINED TO DEPICT CURRENT SITE CONDITIONS. IT SHOULD BE MAINTAINED SUCH THAT IT WILL ALWAYS REFLECT THE MEASURES THAT ARE INSTALLED DURING THE VARIOUS PHASES OF CONSTRUCTION. IT IS IMPRACTICAL TO DETERMINE ALL THE INTERMEDIATE PHASES OF CONSTRUCTION THAT WILL OCCUR, THUS THESE DOCUMENTS WILL HAVE TO BE UPDATED THROUGHOUT THE LIFE OF THE CONSTRUCTION PROJECT.

**DEMOLITION**

- 1. ALL EXISTING ABOVE AND BELOW GROUND STRUCTURES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE FULLY REMOVED UNLESS NOTED OTHERWISE WITHIN THIS CONSTRUCTION SET. THIS INCLUDES FOUNDATION SLABS, WALLS AND FOOTINGS, CAVITIES LEFT BY STRUCTURE REMOVAL SHALL BE BACKFILLED WITH SATISFACTORY MATERIALS AND COMPACTED PER THE SPECIFICATIONS.
- 2. CLEARING LIMITS SHALL BE PHYSICALLY MARKED IN THE FIELD.
- 3. ALL DEMOLITION WASTE AND CONSTRUCTION DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DESIGNATED AND SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF OFFSITE ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.
- 4. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. DAMAGE TO UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR TO UTILITY COMPANY STANDARDS AT NO ADDITIONAL COST TO THE OWNER.
- 5. ALL UTILITY DISCONNECTION, REMOVAL, RELOCATION, CUTTING, CAPPING AND/OR ABANDONMENT SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY/AGENCY. UTILITY CONTACTS ARE LISTED ON THE COVER SHEET (SHEET 0000).
- 6. CONTRACTOR SHALL PROTECT ALL CORNER PINS, MONUMENTS, PROPERTY CORNERS AND BENCHMARKS DURING DEMOLITION ACTIVITIES. IF DISTURBED, CONTRACTOR SHALL HAVE DISTURBED ITEMS RESET BY A LICENSED SURVEYOR AT NO ADDITIONAL COST TO THE OWNER, PROVIDING CERTIFICATION TO THE ENGINEER OF RECORD FOR EACH ITEM REPLACED.
- 7. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, STRUCTURES, AND FEATURES TO REMAIN. ANY ITEMS TO REMAIN THAT HAVE BEEN DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
- 8. PROVIDE NEAT, STRAIGHT, FULL DEPTH, SAW CUTS OF EXISTING PAVEMENT WHERE INDICATED ALONG LIMITS OF PAVEMENT DEMOLITION.
- 9. ALL UTILITY AND STRUCTURE REMOVAL, RELOCATION, CUTTING, CAPPING AND/OR ABANDONMENT SHALL BE COORDINATED AND PROPERLY DOCUMENTED BY A CERTIFIED PROFESSIONAL, WHEN APPLICABLE, WITH THE APPROPRIATE UTILITY COMPANY, MUNICIPALITY AND/OR AGENCY.
- 10. NO TREES SHALL BE REMOVED, NOR VEGETATION DISTURBED BEYOND THE LIMITS OF CONSTRUCTION WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
- 11. ALL PAVEMENT, BASE COURSES, SIDEWALKS, CURBS, BUILDINGS, FOUNDATIONS, ETC., WITHIN THE AREA TO BE DEMOLISHED SHALL BE REMOVED TO FULL DEPTH UNLESS OTHERWISE NOTED ON THIS PLAN SET. EXISTING BASE COURSE MATERIALS MAY BE WORKED INTO THE NEW PAVEMENT TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATES. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE ENGINEER TO COMMENCE PERMIT RENEWAL PROCESS.
- 12. THE CONTRACTOR SHALL USE SUITABLE METHODS TO CONTROL DUST AND DIRT CAUSED BY THE DEMOLITION ACTIVITY.

**GOOD HOUSEKEEPING MEASURES & WASTE DISPOSAL**

- 1. THE CONTRACTOR SHALL REFER TO THE EPSC PLANS, NOTES AND DETAILS FOR ADDITIONAL NOTES AND REQUIREMENTS RELATED TO GOOD HOUSEKEEPING MEASURES AND WASTE DISPOSAL.
- 2. OPEN BURNING IS PROHIBITED UNLESS IT IS SPECIFICALLY ALLOWED BY LAW. IF ALLOWED, NATURAL VEGETATION, TREES, AND UNTREATED LUMBER SHALL BE THE ONLY MATERIALS THAT CAN BE OPEN BURNED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE STATE AND LOCAL PERMITS PRIOR TO ANY BURNING.
- 3. DISPOSAL OF ONSITE VEGETATION AND TREES BY CHIPPING THEM INTO MULCH IS PREFERABLE TO OPEN BURNING. THIS MULCH MAY BE USED AS AN ONSITE SOIL STABILIZATION MEASURE WHERE APPROPRIATE.
- 4. WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR. IMPACTS TO WATERS OF THE STATE/U.S. SHALL BE AVOIDED IF POSSIBLE. IF UNAVOIDABLE, THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S), AND CORPS OF ENGINEERS SECTION 404 PERMITS, TO DISPOSE OF WASTE MATERIALS.
- 5. MATERIALS AND LAND STAGING AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY ENVIRONMENTAL PERMITS OBTAINED SOLELY BY THE CONTRACTOR. THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATES. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE ENGINEER TO COMMENCE PERMIT RENEWAL PROCESS.

**EROSION AND SEDIMENT CONTROL NOTES**

- 1. THE CONTRACTOR SHALL REFER TO THE EPSC PLANS AND DETAILS FOR ADDITIONAL NOTES AND REQUIREMENTS RELATED TO EROSION AND SEDIMENT CONTROL.
- 2. EROSION AND SEDIMENT CONTROL MEASURES TO BE SELECTED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
- 3. SITE EROSION CONTROLS SHALL BE CHECKED AND IF NECESSARY, REPAIRED WEEKLY AND WITHIN 24 HOURS AFTER EACH RAINFALL GREATER THAN OR EQUAL TO 1/2". IN THE EVENT OF CONTINUOUS RAINFALL, EROSION CONTROLS SHALL BE CHECKED DAILY.
- 4. ANY OFF SITE SEDIMENT ACCUMULATIONS SHALL BE REMOVED DAILY. OFFSITE ACCUMULATIONS DEPOSITED ON PRIVATE PROPERTY SHALL BE REMOVED BY METHODS AGREED UPON BY THE CONTRACTOR AND THE ADJACENT LAND OWNER(S).
- 5. STABILIZE AREAS WITHIN 14 DAYS AND STEEP SLOPES EQUAL TO OR GREATER THAN 3:1 WITHIN 7 DAYS.
- 6. CONTRACTOR SHALL PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT FUELING. CONTRACTOR TO COORDINATE EXACT LOCATION WITH OWNER DURING PRECONSTRUCTION MEETING. CONTROL OF OTHER SITE WASTES SUCH AS DISCARDED BUILDING MATERIALS, CHEMICALS, LITTER, AND SANITARY WASTES THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY IS ALSO REQUIRED BY THE CONTRACTOR.
- 7. ALL EPSC MEASURE LOCATIONS AREA APPROXIMATE.

**UTILITIES**

- 1. ALL PROPOSED UTILITY LINES AND EXTENSIONS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE UTILITY COMPANY SPECIFICATIONS. CONTRACTOR SHALL COORDINATE UTILITY DISCONNECTIONS WITH THE APPROPRIATE AGENCY.
- 2. THE CONTRACTOR IS PARTICULARLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF THE EXISTING UTILITIES SHOWN HEREON IS BASED ON TOPOGRAPHIC SURVEYS AND RECORD DRAWINGS. THE CONTRACTOR SHALL NOT RELY UPON THIS INFORMATION AS BEING EXACT OR COMPLETE. SHOULD UNCHARTED UTILITIES BE ENCOUNTERED DURING EXCAVATION OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR INSTRUCTIONS. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION AND REQUEST FIELD VERIFICATION OF UTILITY LOCATIONS.
- 3. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED UTILITY WORK PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE SEQUENCING OF CONSTRUCTION FOR ALL UTILITY LINES SO THAT WATER LINES AND UNDERGROUND ELECTRIC CONDUITS DO NOT CONFLICT WITH SANITARY SEWERS OR STORM SEWERS. INSTALL UTILITIES PRIOR TO PAVEMENT CONSTRUCTION.
- 5. ADJUST ALL EXISTING UTILITY SURFACE FEATURES INCLUDING BUT NOT LIMITED TO CASTINGS, VALVE BOXES, PEDESTALS, CLEANOUTS, ETC. TO MATCH PROPOSED FINISHED GRADES, UNLESS OTHERWISE INDICATED.
- 6. THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.
- 7. UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.
- 8. THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT.
- 9. THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED "AROUND" UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE PLANS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION.

**GRADING**

- 1. CONTRACTOR SHALL ADHERE TO THE EROSION AND SEDIMENT CONTROL PLAN PREPARED FOR THIS PROJECT.
- 2. EARTHWORK SHALL INCLUDE CLEARING AND GRUBBING, STRIPPING AND STOCKPILING TOPSOIL, MASS GRADING, EXCAVATION, FILLING, UNDER CUT AND REPLACEMENT, IF REQUIRED, AND COMPACTION.
- 3. CONTRACTOR TO BACKFILL UNDERCUT AREAS WITH SUITABLE MATERIAL AND COMPACT AS RECOMMENDED BY THE SPECIFICATIONS.
- 4. ALL AREAS NOT PAVED SHALL BE STABILIZED WITH SEED AND MULCH, UNLESS NOTED OTHERWISE.
- 5. ALL EXCESS SOIL MATERIALS SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF OFFSITE IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.
- 6. ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- 7. THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOODWAY OR FLOODPLAIN AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL. BY SAME: ALL MATERIAL SHALL BE DISPOSSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.
- 8. INSTALL EROSION CONTROL BLANKETING CAPABLE OF WITHSTANDING SHEAR STRESS OF 5 PSF ON ALL SIDE SLOPES 3:1 (H:V) AND STEEPER.
- 9. DEWATER AS NECESSARY DURING CULVERT INSTALLATION. PUMP THROUGH A SEDIMENT FILTER BAG AND DISCHARGE IN A NON-EROSIVE MANNER THROUGH VEGETATION. REFERENCE TDOT STANDARD DETAIL EC-STR-31.

**DRAINAGE**

- 1. DISTANCES SHOWN ON PIPING ARE HORIZONTAL DISTANCES FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, UNLESS OTHERWISE NOTED.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE INSTALLATION, INSPECTION, TESTING AND FINAL ACCEPTANCE OF ALL NEW STORMWATER FACILITIES CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH ALL APPLICABLE REGULATING AGENCIES CONCERNING INSTALLATION, INSPECTION AND APPROVAL OF THE STORMWATER CONSTRUCTION.
- 3. ALL STORMWATER FACILITIES, INCLUDING COLLECTION AND CONVEYANCE STRUCTURES SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL AND STATE CODES AND REGULATIONS INCLUDING, BUT NOT LIMITED TO, TDOT STANDARD DRAWINGS AND CONSTRUCTION SPECIFICATIONS FOR ROADWAY CONSTRUCTION.

**PAVEMENT**

- 1. THE CONTRACTOR SHALL BE REQUIRED TO PAVE IN THE DIRECTION OF TRAFFIC.
- 2. THE CONTRACTOR SHALL ATTACH A DEVICE TO THE SCREED OF THE PAVER SUCH THAT MATERIAL IS CONFINED AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A CONSOLIDATED WEDGE-SHAPE PAVEMENT EDGE OF APPROXIMATELY 25 TO 30 DEGREES AS IT LEAVES THE PAVER (MEASURED FROM A LINE PARALLEL TO THE PAVEMENT SURFACE). THE DEVICE SHALL MEET THE REQUIREMENTS THAT ARE CURRENTLY SET FORTH IN TDOT SPECIAL PROVISION 4075E.
- 3. WHERE DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO SHAPE BUSINESS ENTRANCES AND PRIVATE DRIVES, AS WELL AS CLEANING OF EXISTING DRAINS BEFORE PLACING MATERIALS.
- 4. IN ALL CASES, THE LENGTH OF THE PAVEMENT TRANSITION, THE THICKNESS, AND WIDTH OF THE RESURFACING AND ANY ADDITIONAL PAVEMENT MATERIALS SHALL BE AS DIRECTED BY THE PROJECT ENGINEER.
- 5. ANY NECESSARY PAVING OF DRIVEWAYS WILL BE DONE DURING PAVING OPERATIONS ON THE MAIN ROADWAY.

**SIGNING**

- 1. THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS, EXCEPT THAT CUTOUT DIRECT APPLIED COPY SHALL BE USED ON ALL FLAT SHEET SIGNS WITH A GREEN BACKGROUND, OR BROWN BACKGROUND, THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL EXTRUDED PANEL SIGNS SHALL BE DEMOUNTABLE AND ATTACHED TO THE SIGN FACE, AS OUTLINED IN THE TDOT STANDARD SPECIFICATIONS. ALL SHIELDS ON GUIDE SIGNS SHALL BE DEMOUNTABLE AND ATTACHED TO THE SIGN FACE AS OUTLINED IN THE STANDARD SPECIFICATIONS.
- 2. THE TOP OF THE SIGN FOOTINGS SHALL BE PLACED LEVEL WITH THE GROUND LINE.
- 3. ALL SIGNS MARKED "TO BE REMOVED" ARE TO BE REMOVED BY THE CONTRACTOR AND BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED ON THE PLANS.

**PAVEMENT MARKING**

- 1. TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED.
- 2. PERMANENT PAVEMENT LINE MARKINGS FOR THE ROADWAYS SHALL BE 4" STRIP THERMOPLASTIC (60 MI) INSTALLED TO PERMANENT TDOT PAVEMENT MARKING STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED.

**ABBREVIATIONS WITHIN CONSTRUCTION PLANS**

REF	TYPICAL
REF	REFERENCE
PUDE	PUBLIC UTILITY AND DRAINAGE EASEMENT
TDOT	TENNESSEE DEPARTMENT OF TRANSPORTATION
DIA	DIAMETER
NTS	NOT TO SCALE
UG	UNDERGROUND
SAN	SANITARY SEWER
WTR	WATER
PVC	POLYVINYL CHLORIDE
MTEMC	MIDDLE TENNESSEE ELECTRIC MEMBERSHIP CORPORATION
EPSC	EROSION PREVENTION AND SEDIMENT CONTROL
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
SPCC	SPILL PREVENTION, CONTROL AND COUNTERMEASURES
EP	EDGE OF PAVEMENT
FC	FACE OF CURB
FG	FACE OF GUTTER
OC	ON CENTER
LP	LOW POINT
HP	HIGH POINT
EX	EXISTING
CONT	CONTINUOUS
MBSL	MINIMUM BUILDING SETBACK LINE

**REVISION RECORD**

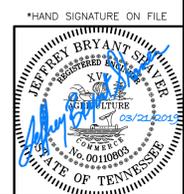
NO.	DATE	DESCRIPTION

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**Civil & Environmental Consultants, Inc.**  
325 Seaboard Lane - Suite 170 - Franklin, TN 37067  
615-333-7797 - 800-763-2326  
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**CITY OF GOODLETTSVILLE  
CULVERT REPLACEMENT  
WREN ROAD  
GOODLETTSVILLE, DAVIDSON CO., TN**

**GENERAL NOTES**

DATE: MARCH 2019 DRAWN BY: KLU  
DWG SCALE: AS SHOWN CHECKED BY: SEC  
PROJECT NO: 101-021  
APPROVED BY: \*JBS



DRAWING NO.: **C001**

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**STANDARD ROADWAY DRAWINGS**

DRAWING REVISION DESCRIPTION

SAFETY DESIGN AND FENCES

S-PL-2	10-10-16	SAFETY PLAN AT SIDEROADS OR PRIVATE DRIVES
S-GR31-1	03-28-17	W-BEAM GUARDRAIL
S-GR31-1A		W-BEAM BARRIER FASTENING HARDWARE
S-GRS-2	07-05-17	SPECIAL CASE: GUARDRAIL ATTACHMENT TO CONCRETE DECKS
S-GRT-3	03-28-17	TYPE 21 GUARDRAIL END TERMINAL
S-GRA-3	07-05-17	TYPE 13 GUARDRAIL ANCHOR
S-GRA-4	07-05-17	IN-LINE GUARDRAIL ANCHOR

EROSION PREVENTION AND SEDIMENT CONTROL

EC-STR-2	08-01-12	SEDIMENT FILTER BAG
EC-STR-3C	08-01-12	SILT FENCE WITH WIRE BACKING
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-32	08-01-12	TEMPORARY DIVERSION CULVERT
EC-STR-37	06-10-14	SEDIMENT TUBE
EC-STR-33A	08-01-12	SUSPENDED PIPE DIVERSION (UPSTREAM)

STANDARD STRUCTURE DRAWINGS

NEW STRUCTURES

STD-9-1	10-07-08	REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLABS
STD-10-1	04-08-05	MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS
STD-11-1	05-01-14	BRIDGE RAILING W/ STRUCTURAL TUBING

LRFD BOX CULVERTS

STD-17-1		INDEX OF DRAWINGS
STD-17-2		TERMINOLOGY
STD-17-3		GENERAL NOTES
STD-17-5		TYPICAL SECTION AND DETAILS
STD-17-6		TYPICAL ELEVATIONS
STD-17-7		CURB, RAIL & EDGE BEAM DETAILS - SKEW NOT LESS THAN 45 DEG.
STD-17-9		INTERIOR WALL END TREATMENTS
STD-17-10		TYPICAL WINGWALL DETAILS AND NOTES
STD-17-11		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-16		WINGWALL DESIGN SECTION
STD-17-17	06-01-11	BACKFILL AND DRAINAGE DETAILS
STD-17-18		BACKFILL DETAILS
STD-17-20		LOW FLOW CHANNEL CONSTRUCTION DETAILS FOR CULVERT INLET AND OUTLET
STD-17-23		SIDEWALK AND MISCELLANEOUS DETAILS
STD-17-25		STAGE CONSTRUCTION JOINT DETAIL (FILL ABOVE TOP OF SLAB NOT GREATER THAN 3'-6")
STD-17-113		SLAB BRIDGE, 1 BARREL AT 8', CLEAR HTS. 6' - 8', 0 - 60' FILL

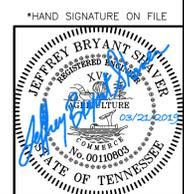
REVISION RECORD

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DATE:	MARCH 2019	DRAWN BY:	KLU
DWG SCALE:	AS SHOWN	CHECKED BY:	SEC
PROJECT NO.:	181-321	APPROVED BY:	*JBS



DRAWING NO. **C002**

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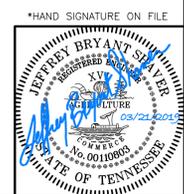




A:\2018\181-321-000\Drawings\181321-001-C202-DETOUR.dwg (DETOUR PLAN) LS:03/19/2019 - 10:28 AM  
 A:\2018\181-321-000\Drawings\181321-001-C202-DETOUR.dwg (DETOUR PLAN) LS:03/19/2019 - 10:28 AM



**NOTE TO CONTRACTOR**  
 THE CONTRACTOR SHALL REFER TO ALL PLANS WITHIN THIS PLAN SET. IT IS NOT THE ENGINEER'S INTENT THAT ANY SINGLE PLAN SHEET IN THIS SET OF DOCUMENTS FULLY DEPICT ALL WORK ASSOCIATED WITH THIS PROJECT.

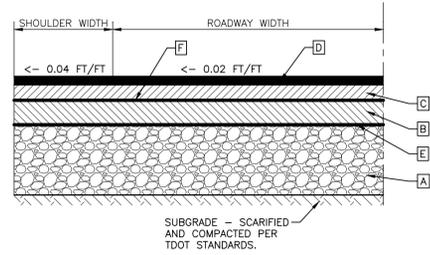


NO.	DATE	DESCRIPTION

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**CITY OF GOODLETTSVILLE  
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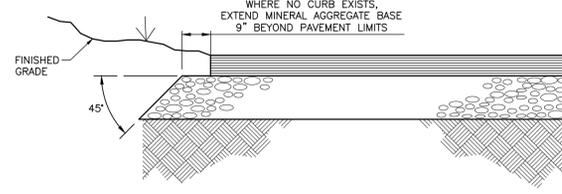
<b>DETOUR PLAN</b>	
DATE: MARCH 2019	DRAWN BY: KLU
DWG SCALE: N.T.S.	CHECKED BY: SEC
PROJECT NO: 181-321	APPROVED BY: *JBS
DRAWING NO. <b>C202</b>	



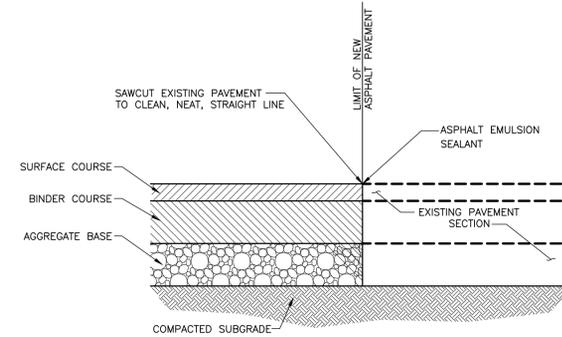
- A 10" THICK, MINERAL AGGREGATE, TYPE A BASE, GRADING D (ITEM 303-01)
- B 4" THICK, BASE COURSE, ASPHALT CONCRETE MIX (PG64-22)(BPMB-HM) GRADING A (ITEM 307-01.01) - STANDARD DUTY ASPHALT.
- C 2" THICK, BINDER COURSE, ASPHALT CONCRETE MIX (PG64-22)(BPMB-HM) GRADING B (ITEM 307-01.06) - STANDARD DUTY ASPHALT.
- D 1.25" THICK, SURFACE COURSE, ACS MIX (PG64-22) GRADING D (ITEM 411-01.10) - STANDARD DUTY ASPHALT.
- E PRIME COAT BITUMINOUS MATERIAL FOR PRIME COAT @ 0.30-0.35 GAL/S.Y. AGGREGATE FOR COVER MATERIAL @ 8-12 LBS/S.Y.
- F TACK COAT BITUMINOUS MATERIAL FOR TACK COAT @ 0.05-0.01 GAL/S.Y.

- NOTES:
- PERFORMANCE GRADE MIX DESIGNATION IS BASED ON ADT AND EXPECTED USE: - FOR LESS THAN 10,000 ADT: PG64-22, STANDARD DUTY ASPHALT.
  - MATERIALS AND CONSTRUCTION PROCEDURES SHALL BE IN ACCORDANCE WITH THE TENNESSEE DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, LATEST EDITION, SECTION 903.05 FOR AGGREGATE BASE COURSE MATERIAL; SECTION 903.06 FOR HOT MIX ASPHALT BASE COURSE; AND SECTION 903.11 FOR SURFACE COURSE.
  - CONTRACTOR SHALL SUBMIT A MIX DESIGN FOR ENGINEERING REVIEW AND RECEIVE APPROVAL PRIOR TO PAVING OPERATIONS.
  - ALL PAVEMENT JOINTS SHALL BE SQUARE WITHOUT FEATHERING.
  - SEAL ALL JOINTS WITH AN APPROVED SEALANT.
  - THE SUBGRADE MATERIALS SHALL BE PROOF ROLLED AND/OR SCARIFIED AND COMPACTED PRIOR TO PLACEMENT OF BASE MATERIAL. EXISTING SUBGRADE MATERIALS THAT ARE UNSUITABLE SHALL BE REMOVED AND REPLACED WITH COMPACTED SELECT MATERIAL.

**DETAIL 201**  
**ASPHALT PAVEMENT SECTIONS**  
N.T.S.



**DETAIL 202**  
**UNCURBED PAVEMENT EDGE**  
N.T.S.



- NOTES:
- PROVIDE TACK COAT ALONG SAWCUT TO BIND EXISTING PAVEMENT TO NEW PAVEMENT. FOR AREAS WITH PATCHING AND OVERLAY, PROVIDE TACK COAT TO BIND EXISTING PAVEMENT WITH NEW ASPHALT.

**DETAIL 202**  
**PAVEMENT SAWCUT**  
N.T.S.

NO.	DATE	DESCRIPTION

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DATE:	MARCH 2019	DRAWN BY:	KLU
DWG SCALE:	AS SHOWN	CHECKED BY:	SEC
PROJECT NO.:	181-321	APPROVED BY:	*JBS



DRAWING NO. **C800**

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